We claim:

1. A cooling system for a non-rail off-road vehicle having an engine with a horizontally oriented rotation axis and a hood covering the engine, the cooling system comprising:

an engine cooling radiator, at least a portion of which is positioned directly above the engine and between the engine and the hood; and

a fan unit for blowing air substantially upwardly through the radiator, the hood having an opening in an upper surface thereof through which passes air blown by the fan unit.

2. The cooling system of claim 1, wherein:

the fan unit is positioned below the radiator and between the engine and the radiator.

3. The cooling system of claim 1, wherein:

the fan unit comprises a plurality of fans positioned between the engine and the radiator.

4. The cooling system of claim 1, wherein:

the engine drives an electrical generator; and

the fan unit includes an electric fan motor powered by the generator.

5. The cooling system of claim 1, wherein:

the vehicle includes a cab, and the fan unit blowing air upwardly and away from the cab.

6 The cooling system of claim 1, further comprising:

an engine charge air cooler positioned behind the engine cooling radiator, above the engine and between the engine and the hood; and

a charge air cooler fan unit for blowing air upwardly through the cooler, the hood having a plurality of openings in an upper surface thereof through which passes air blown by the radiator fan unit and the charge air cooler fan unit.

7. A cooling system for a non-rail off-road vehicle having an engine with a horizontally oriented rotation axis, a cab and a hood forward of the cab and covering the engine, the cooling system comprising:

an engine cooling radiator positioned above the engine and between the

engine and the hood;

a radiator fan unit for blowing air upwardly through the radiator;

an engine charge air cooler positioned above the engine and between the engine and the hood and between the radiator and the cab;

a charge air cooler fan unit for blowing air upwardly through the cooler, the hood having a plurality of openings in an upper surface thereof through which passes air blown by the radiator fan unit and the charge air cooler fan unit.

8. The cooling system of claim 7, wherein:

the radiator fan unit is positioned below the radiator and between the engine and the radiator; and

the charge air cooler fan unit is positioned above the engine and between the engine and the charge air cooler.

9. The cooling system of claim 7, wherein:

the engine drives an electrical generator; and

both fan units include an electric fan motors powered by the generator.

10. The cooling system of claim 7, wherein:

the fan units blow air upwardly and away from the cab.

11. A cooling system for a non-rail off-road vehicle having an engine with a horizontally oriented rotation axis, a hood covering the engine and an engine-driven electrical generator, the cooling system comprising:

an engine cooling radiator positioned above the engine and between the engine and the hood; and

a plurality of electric motor-driven fans powered by the generator and blowing air upwardly through the radiator, the hood having an opening in an upper surface thereof through which passes air blown by the fans.

12. The cooling system of claim 11, wherein:

the fans are positioned below the radiator and between the engine and the radiator.

13. The cooling system of claim 11, wherein:

the fan unit comprises a plurality of fans positioned between the engine and the radiator.

14. The cooling system of claim 11, wherein:

the vehicle includes a cab, and the fan unit blowing air upwardly and away from the cab.